

sDP.01t

Differential Pressure Transmitter

Reliable pressure measurement for your EMS

The **sDP.01t** is a low range differential pressure transmitter for accurate and reliable measurement needs of EMS, building automation systems, HVAC and filter monitoring applications.

The measurement data is available on the **RS-485 Modbus** which eliminates the measurement problems that may arise from transferring analog signals on the field, provides **advantages in installation and commissioning, reduces the wiring and installation time.**



sDP.01t has an **optional on-site alarm generation** function which avoids logging delays in case of an event occurs. This function can be enabled / disabled remotely.

The measurement range, filter constant, alarm parameters, **zero-offset** and measurement unit can be easily set on site.

In addition to the **IP65 enclosure** which minimizes installation problems, **sDP.01t** can be used for air as well as all non-flammable and non-aggressive gases.

Areas of Use

- Room pressure monitoring
- Filter monitoring
- Fan & blower monitoring
- VAV damper control
- Air-flow monitoring
- Modbus RS-485 Communication

Differential Pressure Measurement

Measurement Principle	Piezoresistive (sensor brand TE Connectivity / Honeywell)
Measuring range	25 ... 7500 Pa
Span Accuracy	0.25 % of span
Span Repeatability	0.5 % of reading
Resolution	0.06 Pa
Temperature compensation	Yes
Allowable Overpressure	not to exceed 100 KPa
Media compatibility	Air, N ₂ , O ₂ (calibrated for Air)

Outputs

Type	Digital , isolated 2w RS485
Protocol	Modbus RTU
Baud Rate	9600 ... 156000 bps
Max Nodes on BUS	120
Parameter setup	Via RS485 (Serial number, Location, Device name, Slave ID, Filter constants, Alarm limits, Calibration parameters etc.)
Isolation	RS485 Output isolated from Supply Voltage & Sensor

Mechanical

Enclosure	ABS plastic
Enclosure Dimensions	82 x 80 x 56 mm
Enclosure Protection Class	IP 65
Installation Type	Duct / Wall / DIN Rail
Cable Gland	PG7 suitable for cable dia 3 to 6.5 mm
Pressure Connection	Brass nipples Φ 6.2mm (Alternative diameters can be supplied upon request)
Tubing	PVC, Silicone

Electrical

Supply Voltage	18 ... 35 VDC
Current consumption	60 mA max @ 24 VDC
Electrical Protection	Reverse Polarity

Environmental

Measured media	Air, N ₂ , O ₂
Working temperature	-20 ... +60 °C
Storage temperature	-20 ... +60 °C

Order Options

	sDP.01t.[alarm].[range]	
[alarm]	[0] - Without alarm option	[1] - With alarm option
[range]	[01] - 25 Pa [02] - 125 Pa [03] - 500 Pa	[04] - 1000 Pa [05] - 7500 Pa [06] - Custom specified